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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/700,238 | 11/03/2003 | Thomas J. Gretz | 1674(Arl) | 3768 |
| 30010 | 7590 | 10/04/2004 | EXAMINER | |
| AUZVILLE JACKSON, JR. 8652 RIO GRANDE ROAD RICHMOND, VA 23229 | | | GILMAN, ALEXANDER | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2833 | |

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/700,238 | GRETZ, THOMAS J. | |
| | Examiner | Art Unit | |
| | Alexander D Gilman | 2833 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bawa et al.

With regard to claim 1, Bawa et al (US 5,072) discloses a liquid-tight connector comprising:

a tubular body (12) including a central flange (12a) having a leading and a trailing wall;
a ferrule (24) extending from said trailing wall;
a tubular nose portion (12b) extending from said leading wall;
a sealing ring (22) disposed on said nose portion adjacent said leading wall;
a fastener (20) secured to said nose portion, said fastener securing said sealing ring against said leading wall, said fastener capable of engaging and securing said nose portion to an aperture in a panel in a manner that said sealing ring is compressed and deformed so that the area between said nose portion and said aperture is filled with said sealing ring thereby creating a water tight seal between said nose portion and said panel;
a tubular retainer body (12c) extending from and secured to said trailing wall, said retainer body concentric with and of a greater diameter than said ferrule, said retainer body including inward directed tangs (46) extending within the inner periphery of said retainer body with the free ends of said tangs oriented toward said trailing wall; and
a conduit-accepting channel (Fig. 2) defined as the area between said ferrule and said retainer body, said channel capable of accepting a metallic or non-metallic conduit and creating a water-tight seal between said conduit and said ferrule.

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Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Gudinsky.

Gudinsky (US 5,087,795) discloses a sealing ring comprising:

an annular ring including a base portion (43) and an outer portion(47) having an outer periphery;

said base portion planar and of a first thickness;

said outer portion (47) integral with and extending from said base portion at an angle of 30 to 60 degrees from said base portion;

said outer portion having said first thickness at its juncture with said base portion and a constant increase in thickness to a second thickness at said outer periphery; and

said ring including an inner diameter sized to accommodate the nose portion of a connector (11) that it will be used in conjunction with.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bawa et al in view of O'Neil et al.

With regard to claims 2, 4, Bawa et al disclose all of the limitations except for said fastener being a snap ring which includes: one or more grounding tangs extending outwardly and trailingly at said trailing end of said snap ring;

one or more locking tabs extending from said snap ring into said depression (112) because of an insufficient antecedent basis for this limitation in claim 2) to secure said snap ring to said leading end portion; and

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one or more snap locking tangs extending outwardly from said snap ring to resist said connector being pulled from a panel when connected thereto.

O'Neil et al (US 5,266,050) disclose that said fastener being a snap ring which includes: one or more grounding tangs (23) extending outwardly and trailingly at said trailing end of said snap ring;

one or more locking tabs (24) extending from said snap ring into said depression (112 problem because of an insufficient antecedent basis for this limitation in claim 2) to secure said snap ring to said leading end portion; and

one or more snap locking tangs (22) extending outwardly from said snap ring to resist said connector being pulled from a panel when connected thereto.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Bawa et al with the specified fastener, as taught by O'Neil et al, to easily attach the connector to a junction box. (O'Neil, col. 1, lines 10-14)

With regard to claim 5, Bawa et al disclose the threaded leading end portion

Claims 2, 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bawa et al in view of Gretz.

Bawa et al disclose all of the limitations except for said fastener being a snap ring which includes: one or more grounding tangs extending outwardly and trailingly at said trailing end of said snap ring;

one or more locking tabs extending from said snap ring into said depression (112 problem because of an insufficient antecedent basis for this limitation in claim 2; the depression is interpreted as a groove in the nose's thread) to

secure said snap ring to said leading end portion; and

one or more snap locking tangs extending outwardly from said snap ring to resist said connector being pulled from a panel when connected thereto.

Gretz (US 6,114,630) disclose that said fastener being a snap ring which

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includes: one or more grounding tangs (32) extending outwardly and trailingly at said trailing end of said snap ring;

one or more locking tabs (36) extending from said snap ring into said depression (112 problem because of an insufficient antecedent basis for this limitation in claim 2; the depression is interpreted as a groove in the nose's thread) to

secure said snap ring to said leading end portion; and

one or more snap locking tangs (34) extending outwardly from said snap ring to resist said connector being pulled from a panel when connected thereto.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Bawa et al with the specified fastener, as taught by Gretz, to easily attach the connector to an junction box without screws or twisting for locking. (Gretz, col. 1, lines 4-6)

With regard to claim 5, Bawa et al disclose the threaded leading end portion

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bawa et al in view of O'Neil et al. and Favalora.

Bawa et al disclose (Fig. 2) a liquid-tight connector comprising:

a tubular body (12) having a trailing end portion (12c);

a leading end portion (12b) having a leading edge;

a flange (12a) separating said trailing end portion from said leading end portion;

one or more depressions (30) on said leading end portion;

said trailing end portion including a shoulder (28, 44) adjacent said flange;

a ferrule (34) extending from said shoulder and having a trailing end;

said shoulder of a larger diameter than said ferrule;

said shoulder including threads (44) on its outer periphery;

the diameter of said ferrule tapering from a smaller diameter at said trailing end of said ferrule to a larger diameter adjacent said shoulder;

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a tubular retainer body (46) having an inner diameter slightly larger than a nominal sized conduit it will be used in conjunction with;

said retainer body including conduit tangs (46);

a tubular cover member securing said retainer body to said shoulder, said cover member biasing said conduit tangs inwardly; and

a channel (38) defined by the space between said ferrule and said retainer body, said channel capable of accepting a nominal sized conduit in such a manner that said conduit is held tightly therein and prevented from withdrawal by said conduit tangs.

Bawa et al do not disclose

a removable, discontinuous, annular-shaped snap ring surrounding said leading end portion, said snap ring having a leading and a trailing end;

said conduit tangs being inward and leading extending;

O'Neil et al disclose a removable, discontinuous, annular-shaped snap ring (20) surrounding said leading end portion, said snap ring having a leading and a trailing end;

Favalora (US 5,068,496) discloses (Fig. 7a, 7b) the conduit tangs (117, 119) being inward and leading extending.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Bawa et al with the specified fastener and conduit tangs being inward and leading extending, as taught respectively by O'Neil and Favalora, to easily attach the connector to a junction box without screws or twisting for locking and dependably prevent cable removal.

Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bawa et al in view of Shimriak et al and Jarvis.

Bawa et al do not explicitly disclose that sealing ring is preferably constructed of Santoprene.

and sealing ring polymer having a Shore A hardness of 20 to 60 units.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the specified material for sealing ring, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

For example, Shimriak (US 5,587,865) disclose sealing material constructed of Santoprene (col. 3, lines 9-25);


Jarvis et al (US 5,831,217) disclose sealing ring polymer r having a Shore A hardness of 20 to 60 units (claim 4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

09/29/2004


ALEXANDER GILMAN
PRIMARY EXAMINER